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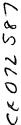
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ABSTRACT

This workbook explains the process of using the goal-based learning (GBL) approach to accelerating performance change to design an education or training program. The first half of the workbook, which focuses on the nature and benefits of GBL, discusses the following topics: shifting the focus of education; differences between lecture-based and goal-based learning environments; structure in lecture-based and goal-based environments; developing a web of support for GBL; the paradox of GBL as flexible yet consistent learning; characteristics of GBL; the integrative learning model as an explanation of the process of learning to change performance; performance change curves; support for learning performance change; and the team performance process. In the second half of the workbook, a systems approach to GBL design is presented that entails using a 10-step transforming process to transform inputs (needs as perceived by stakeholders) into desired outputs (task/learning outcomes). The 10 steps of the transforming process, which are repeated a minimum of three times (each time incorporating feedback), are as follows: determine learning outcomes; identify activities required; plan continuous learning; select relevant context; identify overall goal; determine task outcomes; establish benchmark standards; plan support; build support; and practice facilitating learning experience. Contains 11 references. (MN)



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Goal-Based Learning

Conceptual Design "Jump-Start" Workbook

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Shifting the Focus of Education





Information Focus (What) (Example: Lecture-Based)

Performance Focus (*How*) (Example: Goal-Based)

- A global shift in the focus of education has been taking place since the 1980's. (Its roots start as early as the time of Confucius, around 400 B.C.).
- The focus is moving from an *information-focus* (push information at the learner) perspective to a *performance-focus* (assist the learner to pull to himself/herself relevant information and apply it effectively).
- Examples of these types of learning environments are traditional lecture-based instruction and goal-based learning.
- One of the causes of the shift is a fundamental change in understanding how we learn.
- Humans learn from experience, from making mistakes and exploring alternatives to get where we want to go. This is how we learn to walk, to speak, and to perform on the job.
- What is consistently involved in this learning is an experience, thinking about that experience, identifying strategies to improve outcomes, and taking action on those strategies to change results.



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Comparison of Learning Environments

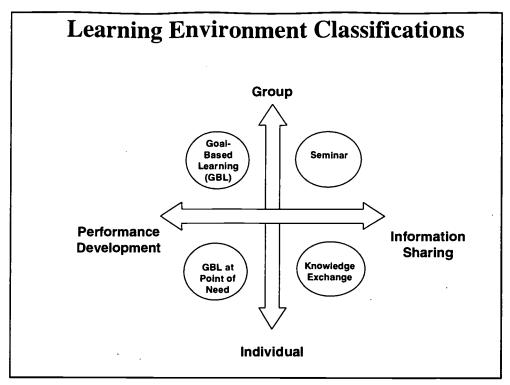
Lecture-Based Goal-Based **Supports Delivery** Structure Supports Performance Learners **Mostly Passive** Mostly Active Learning What is important How is important Out of context In context Not integrated with work Integrated with work Storage & Retrieval **Application & Use** Know about--Use later Work with--Use now **Faculty Deliver Content** Guide Learning **Target** Knowledge Change at Performance Change at Learn & Practice Outcomes Recognize & Explore levels levels

- Lecture-based (information-focused) experiences are often organized by topic and have delivery objectives associated with each topic.
- In lecture-based environments, learners are asked to "play back" what the instructor (or the book) presented.
- Goal-based (performance-focused) experiences are organized by target outcomes related to performance after the learning experience. Movement toward accomplishment of these target outcomes is integrated holistically throughout the learning experience.
- In goal-based environments, learners engage in activities and demonstrate their learning through their actions.



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- Integrative learning environments may be goal-based as well as accommodating other types of learning. Workshops are now being developed using an Integrative Learning approach.
- Point of Need training is frequently supported by computerized multi-media platforms and frequently use goal-based learning approaches.
- "Knowledge Exchange" refers to the Andersen Consulting network of databases by which our knowledge capital is collected, maintained, and grown.



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Structure in a Lecture-Based Environment



- Structure is visible from the outside.
- Structure is a shell supporting delivery of content.
- Learner is contained within the structure and can withhold attention and involvement.
- Structure in lecture-based environments is frequently seen as timed topics with a lecturer using some audio-visual support and learners sitting in chairs taking notes.
- Breaks are timed in support of topics and topics are sequenced by availability of presenters or organization of the material (if from a book, for example).
- Learners can withdraw into silence and may or may not be absorbing information being presented.
- Learners frequently find one or two good ideas to take away following a training session.
- Learning without practice is rapidly digested and forgotten.
- The ratio is frequently one expert to many learners and learning from mistakes is not supported, especially in test-taking cultures.



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Structure in a Goal-Based Environment



- Structure is on the inside and is not readily visible.
- Structure is rich and fully integrated into the environment.
- Learner uses the structure to support engagement in learning activities.
- Structure in goal-based environments is largely internal in the design of the program and activities. Learners are engaged, frequently in teams, and their activities resemble a typical work environment.
- Teams and individuals take breaks when they feel like it and frequently continue working on learning activities outside of dedicated class time (in the case of classroom programs).
- Learners are engaged (individually and collectively) in performing the activities required to accomplish the goals of the program. Withdrawal and non-participation is much more difficult.
- Incidental learning is also encouraged and learners gain much more than the specific targeted outcomes of the program.
- Learning is put into practice immediately and the learning experience becomes a reference point similar to work experience.
- Using computer technology, each learner can access multiple experts and the instructor becomes a guide to learning and resources rather than the resident "expert."



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Web of Support for Goal-Based Learning



- Numbered lines represent activities
- Circles represent support structures
- Support may include:
 - Coaches
 - Job Aids
 - Stories
 - Work Tools
 - Other Learners
- Designing a goal-based learning environment involves a careful analysis of the target outcomes, the learning required to achieve them, and the development of appropriate activities and support structures learners can work with "just-in-time" as needed.
- Goal-based environments have been used successfully in multimedia, computer-aided environments and in paper-based classroom environments.
- Because of the rich support required, development of goalbased learning normally requires more investment of resources than most lecture-based instruction.
- One key in making goal-based learning more supportive of work performance is to make use of the same support systems used on the job to support the activities in the learning environment.
- While learners may have their first exposure to support systems in the learning environment, the habits introduced there may extend to the workplace, accelerating growth on the performance change curve.



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GBL Paradox: Both Flexible and Consistent

- Flexible
 - Accommodates individual and team learning.
 - Can be developed quickly and be effective with live coaches and paper-based support.
 - Can be developed over time and be effective with exclusively multimedia support.
 - Can be supported effectively by a mix of people and technology.

- Consistent
 - Target (performance) outcomes drive GBL development.
 - The structure of the GBL provides the learner all the *support* needed for the learner to *learn* what she/he needs to learn, to *engage* in the activities that lead to learning, and to *produce* task outcomes meeting or exceeding benchmarks.
- Andersen Consulting has created a wide range of goal-based learning environments since 1993.
- Development times and budgets have also varied widely, depending on the nature of the GBL being developed.
- Flexibility is an important characteristic of GBL. It can be adapted easily to meet the needs of the sponsoring organization and the target audience.
- At the same time the essential character of the GBL needs to be consistent. Target (performance) outcomes drive the development of the GBL and support is provided to assist the learners to achieve these target outcomes at the performance level expected.
- When supporting major change efforts at an organizational culture level, several integrated GBL programs completed in series may be more effective than one large-scale GBL. The more learners can practice in a "learning safe" environment new work habits reinforced on the job, the more the learners can anchor those habits and transfer them to their work. Multiple exposures over time to these habits and support systems in GBL environments is a very effective strategy.
- The systems approach to developing GBL environments can be taken to a macro level with smaller programs developed as part of the overall plan.



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Goal-Based Learning is . . .

- An environment focused on targeted performance change where . . .
- learners are challenged to accomplish work-related goals in a work-related context
- and use a rich array of integrated support structures and processes . . .
- in a *risk free* setting that encourages learning from exploration and mistakes.
- Goal-based learning can take many forms. Here are some examples of current GBL programs.
 - A typical work-"day/week" using new work processes (SAP, reengineered systems design)
 - A six-month consulting project in compressed time (accomplished in five or six days)
 - A six-month planning project (accomplished in realtime) with several intensive workshops to help in the development of "real" task outcomes. (This is an integrative learning project is and has aspects of action learning.)
 - A two to four-day intensive workshop where learners create the conceptual design for a goal-based learning program
 - A multimedia, computer-based program where the learner learns about the printing business while practicing consulting skills
- The common elements in the goal-based learning environment are tailored to adapt to learner needs.



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Goal-Based Learning is not . . .

- · A computer based training architecture
- · An exact replica of a work situation
- A case study
- A simulation
- A delivery strategy

Though it may include some or all of these.

- Goal-based learning is more than the sum of its parts.
- In developing goal-based environments, Andersen Consulting has used good ideas from a variety of fields and sources, to include Northwestern University's Institute for the Learning Sciences (and Dr. Roger Schank), problem-based and project-based learning ideas, concepts on building reflective practitioners from Chris Argyris and Donald Schön, and initiatives from resources at Andersen Consulting Education.
- Designing performance-focused environments such as goal-based learning requires a shift in perspective. Instructional designers who were skilled in developing teaching-focused (lecture and activity-based) environments report having to put aside that knowledge, work within the new environment to understand the new concepts, then bring out the best of what they knew to add value to new learning-focused designs.
- Key to building skills in developing these environments is to experience them first hand and, whenever possible, to apprentice with someone who has had successful experience in designing these environments.
- Once the concepts are understood (at the *learn* level on the change curve), then ideas as to how to incorporate this type of learning in multimedia, computer-based environments can be explored.



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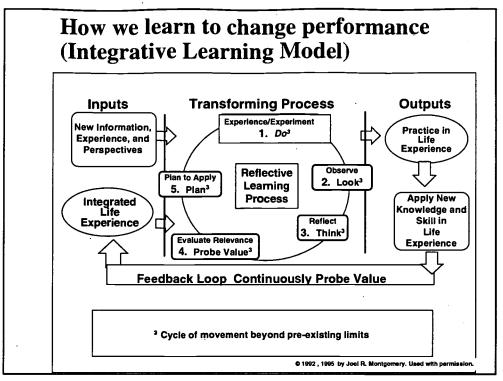


- In the experience of learning, we have found that the learner does not choose to utilize all of the available resources and that, while engaging in the learning and producing what may be needed in the classroom, his skill gets him on the target and he needs more practice on the job to hit consistent bulls eyes.
- This is explained in more detail later in this presentation with the introduction of the Personal Change Curve.



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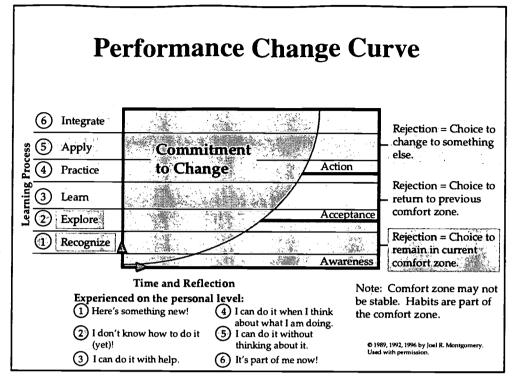


- Each person brings to a new experience the sum total of his/her integrated life experience. As he/she is exposed to new information, experiences, perspectives, technology, ideas, etc., in order to make the new information useful he/she engages with it in a reflective learning process. The overall purpose of this process is to move beyond pre-existing limits to thought, behavior, perspective, and attitude. This is done by first having an experience that involves the new information, looking at the impact of the new information on the experience, thinking about how it works or how to improve it, probing the value and relevance in life, planning to use it again, then testing it and repeating the cycle to the point that the learner moves beyond pre-existing limits.
- Once this is done in the learning phase, the new knowledge and skill is tested in life experience. That usually ends any focused learning experience. Over time the learner will apply effective knowledge in life experience and will continually probe its value and effectiveness. When something has proved valuable over time it will be integrated into the overall life experience that is brought forward to every future encounter.



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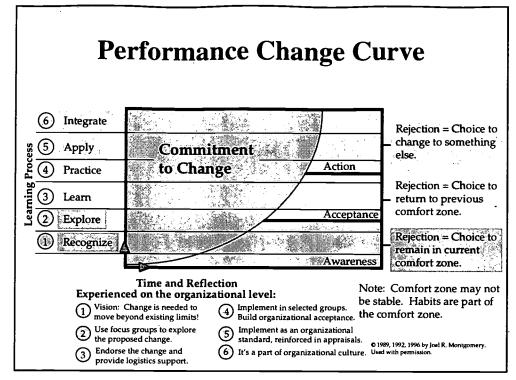




- As they pass through the three stages of awareness, acceptance, and action, individuals and organizations are more and more committed to the changed performance (habit or learning).
- Think of a time when you learned a performance skill (driving a car, riding a bicycle, swimming, skiing,
- How does your experience match the levels identified on the Performance Change Curve?
- Have you watched a child learn to walk, talk, eat by himself/herself? If so, how did the child's experience line up (from your perspective) with the Performance Change Curve.





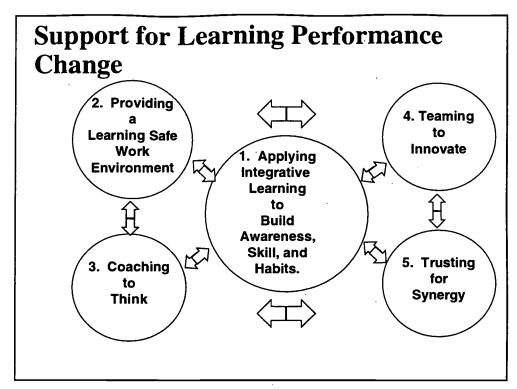


- Organizations, too, pass through the Performance Change Curve when adopting a major change in how they perform.
- While approaches may vary to some extent, the examples above for each of the six levels on the Performance Change Curve holds true for many organizations in many cultures.
- Think of a time when an organization you were involved with (including a family group) was involved in a major change. How does the Performance Change Curve match your experience from an organizational perspective.
- It is important to remember that the organization needs to have moved to the *learn* level on the curve before developing programs to assist employees to change their performance in line with the new vision. Performance change learned before the organization has reached the *acceptance* stage of the curve is likely to be met with resistance rather than support and new work habits introduced while learning the performance change may not be supported by available organizational resources upon successful completion of the learning experience.



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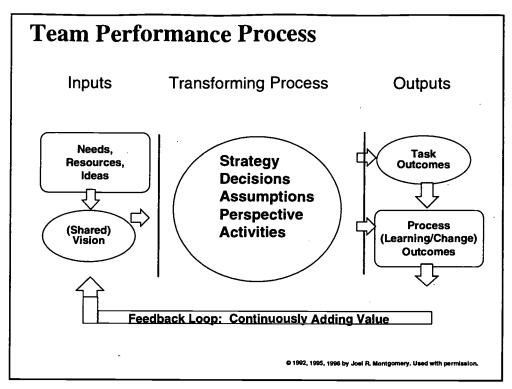


In creating learning environments supporting of Integrative Learning, these four components have been found to be crucially important. Of these, first in importance is providing a learning safe work environment. Second is to create an atmosphere of trust where learners can risk, grow, and learn from each other. Working in teams (even when task outcomes are normally done alone) provides opportunities to innovate and to work with different perspectives. Coaching (through content/practice coaches and learning/process coaches) is important to encourage learners to make use of resources and to grow beyond preexisting limits as they engage in their learning experience.

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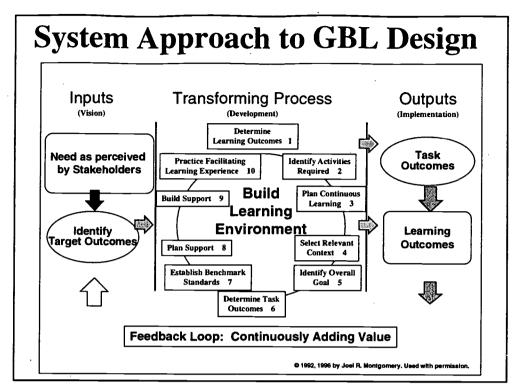


- This is the process that consultants experience on engagements and that learners experience in an Integrative Learning experience, at work in a client environment, in a consulting engagement, and working with family, friends, and co-workers.
- Process outcomes are largely seen as intangible and need special attention during the learning experience so that the learners experience effective knowledge transfer.



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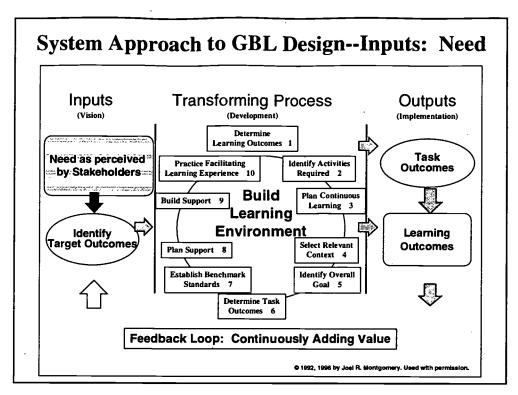
- This does not represent a linear approach to design and development. In working with this system approach, several iterations are required in development of the conceptual design.
- Target Outcomes are frequently revisited as needed as the design progresses.
- In normal circumstances there will be a minimum of three iterations: test of conceptual design, test of the low-fidelity program, and test of the high fidelity program prior to releasing the program for regular use.

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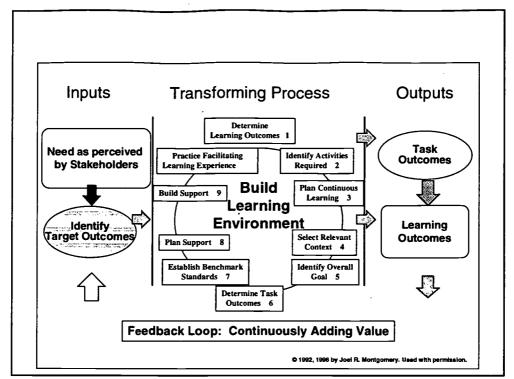


- Stakeholders need to be aware of their investment in the change.
- Ensure all key stakeholder groups are adequately represented.
- Utilize Concept Mapping and Pattern Analysis (or other objective data gathering and analysis approaches) with Stakeholders to identify expectations and to resolve "disconnects."
- Mind-Mapping" and other approaches can also be used to collect and display Stakeholder expectations. The key is to collect them, to display them, and to build consensus about them among the Stakeholders before moving too far in your conceptual design.
- Confirm results with Stakeholders.
- Involve Stakeholders in conceptual design session.



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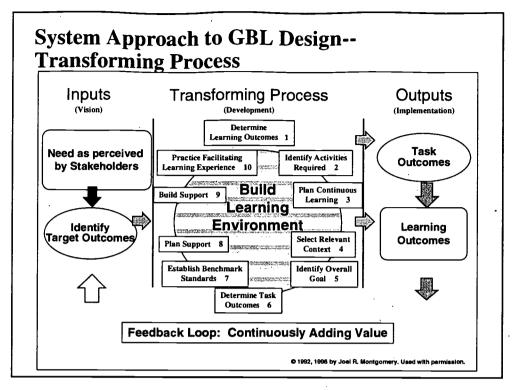


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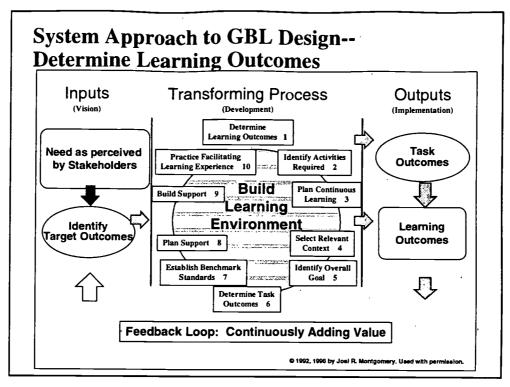


- Key Success Factor: The transforming process is holistic and iterative. In Building the Learning Environment, all components relate to each other and must be revisited when any component changes.
- The experience/process of the development team will mirror the experience/process of the learners.
- As the design evolves through multiple iterations, practice "stage containment" by making sure that the conceptual design is holistic and integrated before moving to new action steps.



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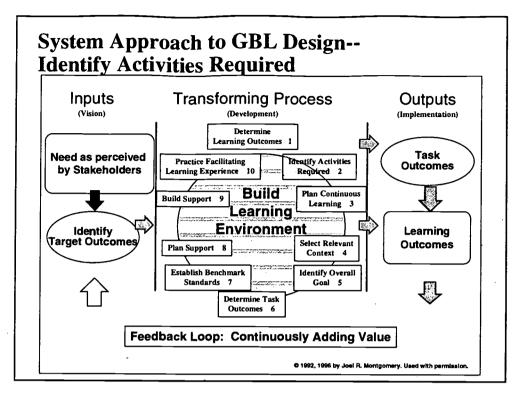


- Definition: Learning Outcomes are the on-going competencies and habit changes the learners build and practice during the learning experience.
- Target outcomes may become learning outcomes if the learner needs to practice working with this performance during the learning experience. In that case, the distinction between a target outcome and a learning outcome will be the level on the Performance Change Curve at which the skill is practiced, with the higher levels identified as the target outcome.
- By engaging in the learning experience, learners actively build skills and knowledge, adding to their integrated life experience.
- There is not a one-to-one relationship between target outcomes and learning outcomes. Sometimes several learning outcomes are required to achieve one target outcome. Sometimes one learning outcome can contribute to the achievement of several target outcomes.



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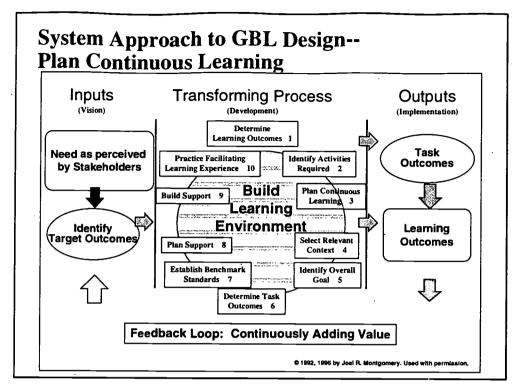


- These activities respond to the question: "What do the learners need to do to accomplish the desired process (learning/change) outcomes?" These are the detailed activities the learners perform and repeat to build awareness, skill, and habits.
- It is important to keep asking, "Is there any natural sequence of activities that needs to be supported?"
- How can the activities work together?
- What context is needed to make the activities feel natural to the learners?



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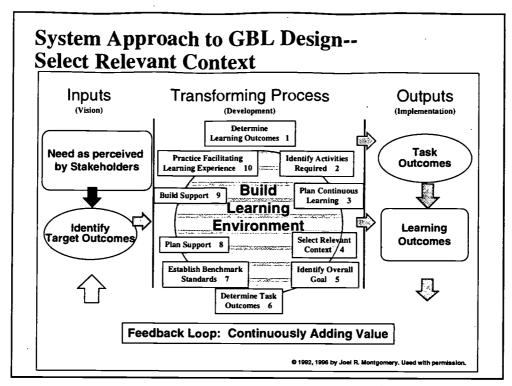
- Learning and reflection on performance are frequently a part of sports (golf, darts, swimming, etc.......) This concept can be used to introduce this strategy as a work habit as well. Placing a continuing focus on learning allows the meaning and importance to emerge from the experience.
- By actively monitoring the steps taken and the decisions involved in producing the task outcomes, learners become aware of how to create new and better task outcomes in the future.
- By focusing on how their work progresses, learners develop insight into effective strategies for their jobs.
- A pattern has emerged to make continuous learning seem more natural: Look at a background (a challenge/idea/discovery/experience); then draw some "lessons learned" (aha's, reminders, new learning); then develop an action plan (best personal practice going forward) (stating "what I plan to do with what I learned.").
- Learning Coaches are frequently required to make this focus on learning a part of the whole learning experience.
- Key points to keep in mind: How are learners supported in tracking their decisions and consequences of these decisions? How are learners encouraged to learn from mistakes and to plan more effective alternatives?



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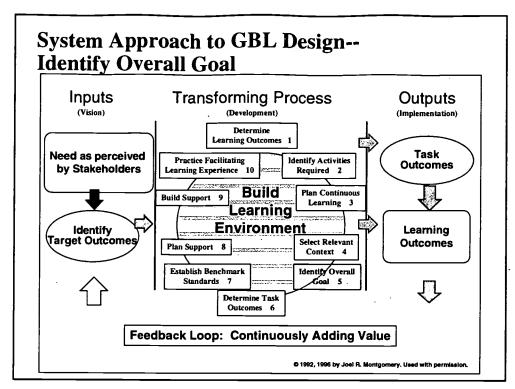


- Providing a "learning safe," "authentic" context allows the learners to transfer learning and habits to their work environments.
- A key concern is to know use the context in which learners will be applying the target outcomes.
- What needs to happen to make the context "learning safe?"
- How "authentic" does the context need to be to support accomplishment of target outcomes?
- What support is/needs to be available in the "authentic" context?
- In Goal-Based Learning design, the context is often a background case against which "live action" and several optional solutions (task outcomes) take on an "authentic" feel.
- Key to success is to create the context that matches the work environment except for its "learning safe" provisions.
- Ensure that learners can make mistakes and learn from them in this environment.



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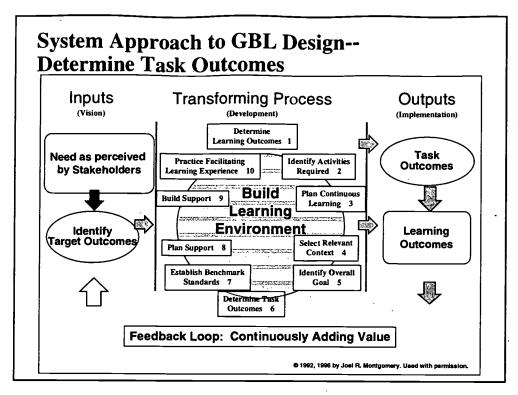
- The overall goal is the primary goal of the activities in the workshop.
- By pursuing this goal, each learner accomplishes the learning outcomes along the way to the goal.
- The goal needs to be cumulative in that all of the activities need to "roll-up" into the overall goal.
- The goal needs to be understood by the learners.
- Progress toward the goal needs to be very visible to learner and faculty alike.

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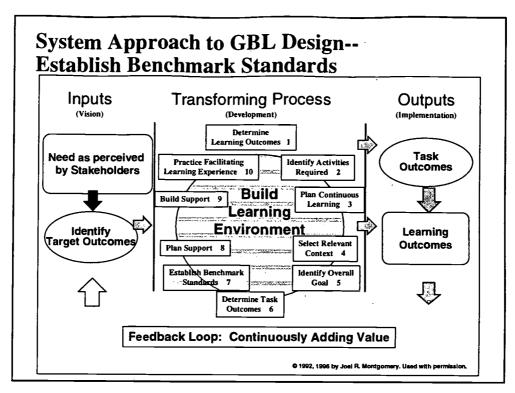


- Task outcomes are the logical consequences (outputs) of engaging in the (learning) activities in the relevant context.
- Task outcomes need to be clear, plausible, and consistent with the context. Progress toward the task outcomes as well as their accomplishment need to be obvious to the learners.
- Task outcomes can be authentic products for reuse outside the learning environment (drafts, job aids, presentations for audiences, etc..........)
- Task outcomes need to be reviewed by the learner during and after the production process to lead to accomplishment of process outcomes.



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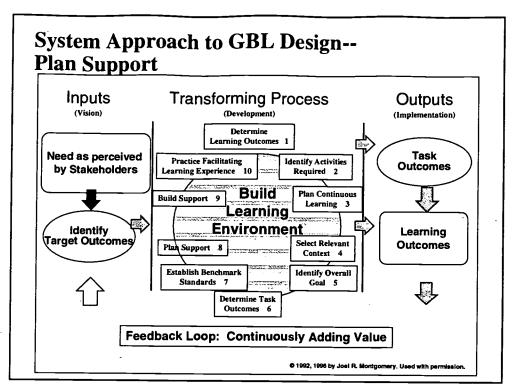


- Benchmarks serve to challenge the learners to produce the task outcomes to a level of quality that assures that they have engaged to the point of building their learning to target levels on the Personal Change Curve.
- Identify objective benchmarks to which task outcomes can be mapped.
- Make sure the learners and faculty use the same benchmark standards to review progress toward and completion of the task outcomes.
- Provide a range from acceptable to excellent.
- Keep benchmark standards generic to support multiple acceptable outcomes.



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- What support will learners need "just in time" to be able to engage in the activities and to accomplish the desired task and process outcomes?
- How can "authentic" resources used on the job be made available during the learning experience?
- How can we think "out of the box" to provide resources beyond apparent limits?
- How can we make sure resources provided are also available and applicable on the job?
- EXAMPLES: Coaches, conference calls, participant binders, videos, multimedia products, performance support systems, e-mail.
- Use the activities as the focus for support planning.
- The final aspect of this step is to build a plan for the work including what support needs to come first, who will be responsible, what support pieces are interrelated, etc.......



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Typical Support for GBL

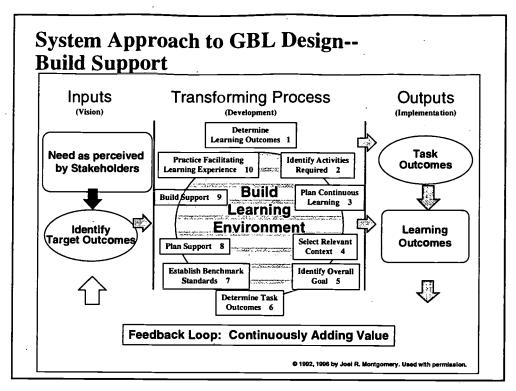
- Navigation coaches to guide the learners through the learning process.
- Content coaches to provide "expert" help.
- Stories in context to help make sense of the learner's situation by telling of similar situations others have been in.
- Reference libraries & tools
- Coach-participant team members
- Integrated performance support
- On-line help systems
- Treasure Maps to guide learners through activities
- Benchmark reference points for outputs
- On-demand support is available at a time when the user wants it. For example, a dictionary or glossary file are on demand support. The user chooses when to access them.
- Just-in-time support is sometimes "thrust" upon the user. In many cases the user won't even know that she or he needed support. An example of just-in-time support is a coach popping up (or in) to warn you about or explain the results of your actions. Other examples include meters changing to reflect satisfaction, sales, etc.
- Support generally falls into one of three areas: Navigation through the learning environment and resources; Content with the new information required to be used; and Process dealing with applying new knowledge and skill to accomplish the task outcomes of the activities.

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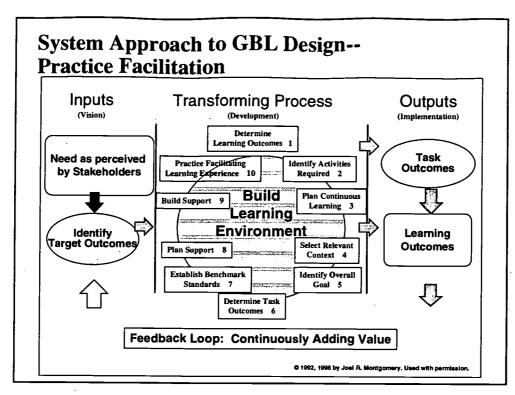
- Key Success Factor: Learning Coaches frequently play a key role in the success of Goal-Based Learning Environments.
- Resources need to be redundant, flexible, and accommodate a range of learner entry skills.
- Learners need to know how, why, and when to access resources (human, print-based, computer, etc.)
- Resources need to support accomplishment of both task and process outcomes.
- Learners need to "pull" from resources what they need when they need it (resources available "on-demand").
- Learners also need "just-in-time" interventions when they do not have the expertise to realize they are in need of guidance or new direction.
- Resources need to represent those available in the work environment.
- Building the resources means to have the appropriate resources assembled and available at the time the learning experience is scheduled.



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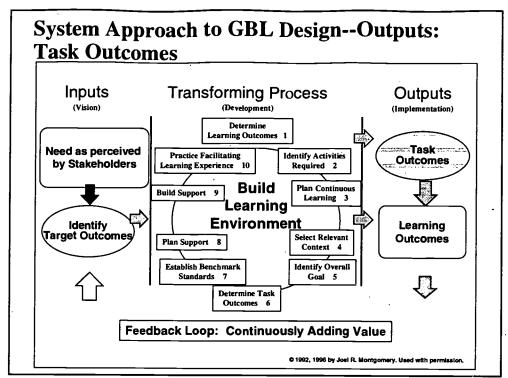


- Frequent practice of integrated parts of the design confirms its effectiveness and allows for upgrades of the learning experience during development.
- An early practice of the design by a sample of the targeted learners will confirm both its effectiveness and the support required.
- As the design unfolds, completed pieces and pieces in development can be practiced together.
- Target outcomes and performance levels on the Personal Change Curve, task and process outcomes, and the components of the learning environment can be reviewed and revised as needed.



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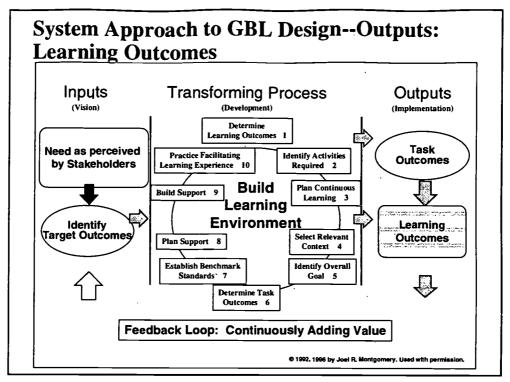


It is important for the development team and the faculty (learning coaches, practice coaches, etc.) to match the task outcomes actually produced during the learning experience with the benchmarks and to observe and to solicit feedback to ensure that participants have the support required to produce the task outcomes to the standards expected within the time allowed.



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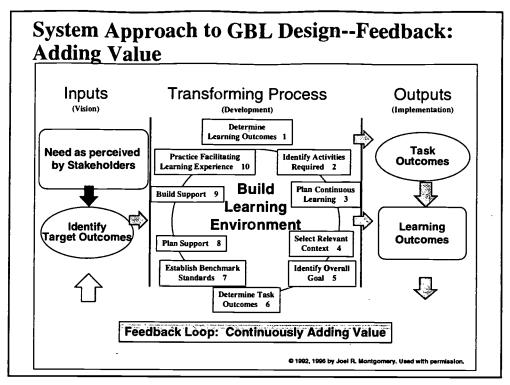


- Learning Outcomes also need to be monitored during the learning experience so that the development team and the faculty (learning coaches, practice coaches, etc.) can be sure that the learning outcomes are reached to the level desired during the actual learning experience.
- It is also important to monitor that the learning environment is "learning safe," supportive, and authentic to the context in which the target outcomes will be used while keeping in mind the "learning safe" and supportive requirements.



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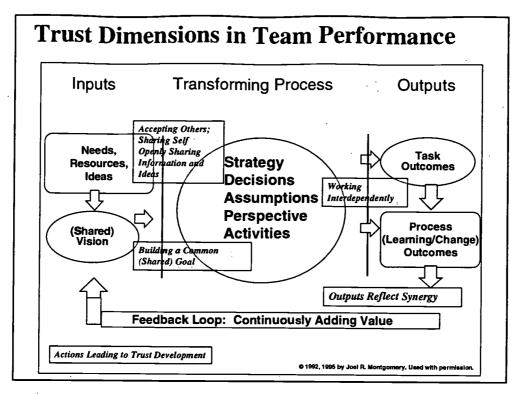


- As learners complete the learning experience, validate accomplishment of the target outcomes to the desired levels on the Personal Change Curve and/or match task and process outcomes with target outcomes to identify required revisions to any components or to the design as a whole.
- Be sure that reported accomplishment of the target outcomes at the specific level on the Performance Change Curve matches Stakeholder expectations.
- Be sure that the target outcomes at those performance levels meet the needs of the learners and the job.
- Monitor learning and performance improvement suggestions for future development.
- Use quantitative and qualitative surveys to assess effectiveness of learning on performance on the job.
- A Lotus Notes mail-in database with surveys tied to target outcomes and to the Performance Change Curve can be used to get Stakeholders expectations in advance and feedback from participants (and their supervisors) 7-days after, 3 months after, and 6 months after completing the learning experience.



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- The boxes in *italics* represent actions taken by the learners that lead to trust development. Effective trust development is reflected by synergy in the outputs.
- This process will be experienced by participants in the learning experience and will be mirrored in the design process experienced by the development team.
- Paying attention to the trust level currently being experienced, and matching that trust level with the appropriate activity, will greatly facilitate the development of trust and reflect synergy in the team's outputs.





Some Key Lessons Learned

- Learners . . .
 - Experience some initial discomfort their first few hours in the new environment.
 - Raise their expectations in their second GBL based on their success and experience in their first one.
- Need a navigation (learning coach) to intervene regularly to focus on learning rather than doing.
- Need to work toward clearly defined benchmarks.
- Need to give and receive feedback on learning and performance change.
- In their first goal-based learning experience learners are often challenged by the difference in expectations of their behavior in the learning environment.
- Learners quickly learn to function well in the new environment and come to their second goal-based learning experience with higher expectations for the program and the value they will gain from it.
- Learning from experience is not "as natural an act" as is assumed. Rushing from one task outcome to another is typical behavior and does not support meaningful learning. Proactive interventions are required, frequently at first, to get the learner(s) to focus on their experience and what they are learning from it. This may be done live or "virtually" via computer.
- Benchmarks assure the desired levels of learning and performance are being met by the learner. Learners and people/computers giving feedback need to know and use the same benchmarks.
- Feedback on learning and performance change is an important part of the process during and after the GBL. Electronic-mail surveys seven days after a program, followed-up at the three and six month mark after completion allow a focus on achievement of target outcomes on the job and opportunities for continuous improvement.



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More Key Lessons Learned

- Sponsoring Organizations . . .
 - Need to settle on a handful of key target outcomes.
 - Need to give advance commitment to key target outcomes at specified performance levels.
 - Need to have logistics in place to support the targeted performance change.

- Key Resources
 Include . . .
 - Skilled development and delivery team(s) with GBL, content, and context expertise.
 - Adequate time, money, & personnel to develop & deliver Goal-Based
 Learning.
 - Navigation (learning)
 coaches ready and in place
 when the program is ready
 for distribution.
- More than a handful of target outcomes results in a rush to accomplish too many things in too short a time for any "deep skills" to be practiced. Too many target outcomes will lower the expected performance level significantly.
- Using electronic-mail survey techniques to poll key people invested in the target learners to solicit their ideas and later to confirm the target outcomes and performance levels establishes a benchmark for the development team.
- Development teams need both GBL and content expertise to build support for clear target outcomes. Once the program is developed, delivery teams also need in-depth understanding of how to guide the learning in a GBL environment. Navigation (learning) coaches need to be selected and trained prior to delivery of the programs.
- Design of goal-based learning comes from an entirely different perspective than familiar instructor-led, lecture-activity-based design. Existing lecture-activity based programs are not easily retooled into goal-based learning. The programs can be completely reworked based on target performance outcomes rather than on target content delivery.
- Because of the rich, integrated structure supporting the learning environment, GBL environments require significantly greater investment of resources to develop than do leaner, lecture-based environments.

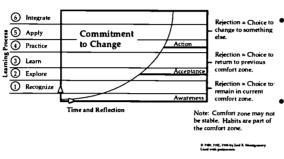


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Organizational Readiness for Goal-Based Learning

Performance Change Curve



- Organization is at the acceptance stage of the change curve.
- Targeted performance change is at the *learn*, *practice*, and/or *apply* levels of the change curve.
- Time frame and resources support goal-based development and implementation
- In the *acceptance* stage the organization has moved to at least the *learn* level on the curve, has endorsed the change and is putting in place the logistics to support the change throughout the organization. Goalbased learning is one of the support mechanisms being used.
- It is sometimes more effective to take a fresh look at performance needs and to develop a learning-focused plan to meet those needs. Such a plan could include goal-based learning to "jump-start" performance or to take people to new levels of performance. The plan could also involve learning as a part of job assignment, coaching others to support learning by the coach as well as by the people being coached, mentoring programs, action-learning groups, regular feedback with positive performance change ultimately rewarded in the performance review and promotion structure of the organization (when the organization reaches the apply level on the change curve).
- Performance change at the *apply* and *integrate* levels of the curve normally requires a great deal of time and experience, much more than normally available in a short-duration GBL. Sequenced GBL's can be used to move people into the *apply* level.



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Other Readiness Factors



- Developers have a solid experience of goal-based learning from both a learner and a educator viewpoint.
- Logistics are in place to support new work habits learned through the goalbased experience.

- Developers need a firm foundation in goal-based learning design. GBL's learning-focused approach to development is a significant departure from the teaching-focused approach used widely throughout the last century.
- Resources are key for development and implementation of effective goal-based learning. This is more important in the work environment than in the learning environment.
- Because learners will be developing work habits in the GBL that emphasize the routine use of support in the work environment, the support needs to exist when the learners exit the GBL and move back to their workplace.
- Non-work resources are occasionally required to support complex learning environments. This is especially true if time compression is at a maximum and learners (who would normally have days or weeks to sift through information) need to "come up to speed" very quickly. Each time non-work support resources are considered, developers must weigh the trade-off between completing the learning activities in the time allowed and in developing reliance on resources that will not truly be available in the workplace.



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